

26 June 1968

Mr. Anthony L. Galeota, Jr. Town Engineer Acton, Massachusetts

Re:

Acton Elementary School ERF&A Project Number 6614

Dear Mr. Galeota:

Enclosed you will find two copies of our Revised Bridge Design No. 5B, which was redesigned to conform to your recommendations as indicated in your letter of June 10, 1968, to our office.

There will be three 8'-0" diameter culverts with 45° bevelled sections at both ends that will be installed with stone rip-rap around the periphery of the three pipes. The culverts will be made from No. 10 gauge asphalt coated galvanized metal. Each pipe will be separated by at least 36 inches. We are also submitting to the Board of Selectmen our Revised Bridge Design No. 5B, for the approval of the Hatch Act Committee.

In accordance with your recommendations, we will be using an elevation of 202.0 feet as the top of our culvert, and you recommended 194.0 feet as the bottom invert of the pipe. We feel that it is necessary at this time to go on record as disagreeing with your recommended elevation for the following reasons. At the proposed bridge location during the recent flooding, we had a high water elevation of 203.0 feet. We recommended that the top of the culvert should be placed at a minimum elevation of 203.5 feet. It is our feeling that if the culvert is kept at the specified 202.0 feet a damming effect will be produced which would certainly jeopardize the structural quality of the bridge.

The present bottom elevation of the brook is 197.5 feet. In keeping with your recommended invert elevation of 194.0 feet, this will mean that the contractor will have to do a substantial amount of dredging which will in turn increase the contractor's work, price, and perhaps jeopardize our ability to secure approval from the Hatch Act Committee simply because we are indeed disturbing the existing brook. It is our belief that within a short period of time the silt and mud at the bottom of the brook will have regained its natural elevation of 197.5 feet.

SEE PLAN 4082 ENUIZ DEPT FILES



14 May 1968

Mr. Galeota Town Engineer Acton, Massachusetts

Re:

Acton Elementary School ERF&A Project Number 6614

Dear Mr. Galeota:

Enclosed you will find two copies of our Bridge Design No. 3A, which we propose to construct over Fort Pond Brook (see Site Plan). We have already received structural approval from our Engineering Consultants, LeMessurier Associates, and we would like approval from you and would appreciate any comments on the design of this bridge.

We have designed the bridge to meet Arlington Street at its present elevation. Does the Town have any plans to raise Arlington Street and install a new bridge over Fort Pond Brook? The current bed of the stream is at 197.5 feet. We found that the high water mark at this point was 203.0 feet, and we are leaving approximately six inches to the top of our culvert.

We would like to give permission to A. Pasquale and Sons, our General Contractor, to begin construction on this culvert as soon as possible, so we would appreciate your immediate attention to this problem.

Please don't hesitate to call us if you have any questions.

Very truly yours,

EARL R. FLANSBURGH & ASSOCIATES

Charles R. Rolando, Associate

CRR:sh Enclosures

Copies to: Mr. Richard Hodgman

Mr. Dennis LeLievre

SEE PLAN # 4082 ENGIR DEDT FILES



RECEIVED

3 April 1968

Mr. Galeota Town Engineer Acton, Massachusetts

Re:

Acton Elementary School ERF&A Project Number 6614

Dear Mr. Galeota:

In reference to our 2 April 1968 telephone conversation, we will indeed forward our revised bridge design, to be constructed over Fort Pond Brook, before we approve any construction by the General Contractor, A. Pasquale & Sons.

We would appreciate your forwarding to our office a copy of the proposed changes to Arlington Street and to the existing bridge over Fort Pond Brook in the vicinity of our proposed bridge.

Very truly yours,

EARL R, FLANSBURGH & ASSOCIATES

Charles R. Rolando, Associate

CRR:sh

Copies to: Dennis LeLievre, Clerk of Works

Richard Hodgman, Chairman, Acton Permanent

A. Pasquale & Sons

June 10, 1968

Earl R. Flansburgh and Associates 119 Mt. Auburn Street Cambridge, Massachusetts 02138 Att: Mr. Charles R. Rolando

Dear Mr. Rolando:

12 Fr.

I have reviewed a revised bridge plan called Design No. 4 for your project No. ERF&A 6614 and have several comments to pass along.

Three 7 foot diameter culverts would give approximalely 115 sq. feet of area, slightly less than the 120 sq. feet r
recommended by our Fay, Spoffard and Thordyke Report. Taking
under consideration the increased head loss due to friction
in the corrugated culvert versus a conrete box culvert, we
would recommend using three 8 foot diameter culverts. Using
elevation 202.0 as the top of the 8 foot culvert, the invert
would then also correspond to our report at elevation 194.0

I would also recommend that both ends of the culverts be fitted with beveled end sections and masonry rip-rap be placed arougd the periphery of the end sections to prevent erosion.

I also feel that the culverts should be of No. 8 gauge galvanized and strutted during construction.

1-10%

The minimum separation between the recommended culverts is 36 inches rather than the 12 inches as shown on your plan.

To the best of my knowledge no Hatch Act petition has been filed with the Department of Natural Resources for the contemplated construction along Fort Pond Brook. As you know, municipalities are not exempt from Chapter 220, Acts of 1965.

Very truly yours,

Anthony L. Galeota, Jr. Town Engineer

ALG: bw

cc. Richard Hodgman, Chairman Acton Perm Bldg. Comm.

Board of Selectmen

5 June 1968



RECEIVED

DATE: JUN 6 1968

BY: 0-50 1.

Mr. Galeota Town Engineer Acton, Massachusetts

Re:

Acton Elementary School ERF&A Project No. 6614

Dear Mr. Galeota:

We have enclosed two copies of our Revised Bridge Design No. 4. Again, our Structural Consultants, LeMessurier Associates, have approved the structure.

In accordance with our last telephone conversation, we have lowered the invert elevation to  $195.0^{\circ}$  and installed three  $7^{\circ}-0^{\circ}$  diameter culverts in order to make the overall horizontal dimension greater than  $20^{\circ}-0^{\circ}$  per your request (see enclosed drawing).

Please don't hesitate to call if you have any questions. We would like to have your approval by the end of this week in order that we may instruct the Contractor to start construction immediately.

Very truly yours,

EARL R. FLANSBURGH & ASSOCIATES

chartes R. Rolando, Associate

CRR:sh Enclosure

EADL D ELANGRIDON ... TENNIC ... RECKED ... HIGH C ROWNING ... LAWDENCE E DOEDED ... CHADLES O DOLANDO ... ORECODY D VILLANGEVA

April 10, 1968 (Elm Street School Drainage)

Earl R. Flansburgh and Associates 119 Mt. Auburn Street Cambridge, Mass. 02138

Att: Mr. Charles R. Rolando

Dear Sir:

In reply to our telephone conversation of April 2, 1968 and your letter of April 3, 1968, I am enclosing a portion of the plan prepared by Fay, Spoffard and Thorndike for the Town of Acton.

May I also point out that during the recent rains and thaw the storm water elevation reached elevation 202.4 USGS at the culvert at Arlington Street. I would imagine that your bridge deck would be considerably higher than the high water elevation. The invert grade should correspond relatively to the proposed inverts in the enclosed profile.

Very truly yours,

Anthony L. Galeota, Jr. Town Engineer

ALG sbw

Enc. Plan

cc. Richard Hodgman, Chairman Acton Permanent Building Committee

A. Pasquall & Sons

January 13, 1967

Mason & Fry 4 Brattle Street Cambridge, Massachusetts

Dear Mr. Mason:

I have discussed the matter of a new box culvert for the proposed school driveway to Arlington Street at Fort Pond Brook with Mr. Charles Perkins our Engineering Consultant.

We will agree to Fay, Spofford and Thorndike's recommendations for culvert size and depth at Arlington Street. However, we would like to point out that during the flood of October 1962, (10" rainfall in 3 days) the surface of the water was at elevation 201.7.

When your Engineer has completed his preliminary proposals would you please send us a copy for review by us.

Very truly yours,

David Abbt, Engineering Assistant

DA/nag

COPY OF FORT POND BROOF

PIZOFILE (SHEETZ) BY

FMY SPOFFORD & THOIRN DILKE SENT

JAN 13, 1968